FAST Study

Feedback on Alignment and Support for Teachers (FAST) Study: Program Description

The Feedback on Alignment and Support for Teachers (FAST) program provides 4th-grade teachers in math and 5th-grade teachers in English language arts (ELA) the opportunity to participate in a new, expertly-designed program developed to support teachers in aligning their instruction to their state's unique college- and career-readiness (CCR) standards. The FAST program gives teachers the tools to reflect on the extent to which their instruction addresses the topics emphasized in CCR standards at the appropriate levels of cognitive demand for all students, including English language learners (ELLs) and students with disabilities (SWDs). The FAST program, which uses internet and video technology, includes:

- » Personalized instructional coaching
- » Tools to promote reflection on alignment, including an instructional log and video recordings of instruction
- » Access to an online library of instructional and professional learning resources aligned to participants' state standards

The activities occur over the course of two school years.

PERSONALIZED INSTRUCTIONAL COACHING

Through the FAST program, teachers meet with a FAST coach individually and in school-based, grade-level, collaborative academic study teams (CASTs). The FAST coach is an expert in math or ELA content and instruction and meets with the teachers virtually, using video-conferencing

technology. Each of the 4th-grade teachers in a school work with the same math FAST coach and each of the 5th-grade teachers with the same ELA FAST coach.

During the **individual coaching sessions** teachers and coaches discuss the content of the teacher's instruction for a lesson or series of lessons, examine relevant resources from the project's online library of resources, and identify actionable next steps to strengthen alignment to their state's standards. The teacher and coach look closely at the topics addressed in the recent lesson as well as the level of cognitive demand emphasized during instruction and discuss ways of supporting students in mastering the standards, particularly for ELLs, SWDs, and struggling students.



FAST coaches and teachers meet using video-conferencing technology.

During the **CAST meetings** teachers collectively meet with the math or ELA coach in their school to better understand their state's standards and collaboratively plan instruction to support students in meeting those standards. Together, they identify the standards that will be addressed in upcoming lessons, examine relevant resources from the FAST online library, and work together to plan instruction that emphasizes the topics addressed in those standard at the right level of cognitive demand.

TOOLS FOR REFLECTION

The tools for reflection are designed to support ongoing conversation with the FAST coach and encourage individual reflection on instruction. They include instructional logs and procedures for collecting and reviewing video recordings of instruction. Teachers access these tools through individual accounts within the FAST online portal.

The **instructional logs** are used to reflect on the content of instruction over a period of time. When completing an instructional log, teachers provide information on the extent to which their instruction emphasized specific math or ELA topics and cognitive demands as well as the extent to which they used

instructional accommodations with students, including ELLs and SWDs. Fourth-grade teachers also report on the extent to which they emphasized mathematical practices/processes and 5th-grade teachers provide the lexiles of the texts they used during the time period.

As soon as teachers finish an instructional log, they can view personalized graphics that show the alignment of their own instruction to their state standards. First, they see the **color map**, a sample of which is shown below. The left side of the color map provides a visual of the teacher's reported instruction, numbers indicating the proportion of instruction the teacher reported giving to each topic and cognitive demand and the color saturation indicating the emphasis given to the associated topic and cognitive demand - the darker the cell the greater the emphasis. The right side of the color map (labeled Target) provides a visual of the proportion of the content of the state standards dedicated to each topic and cognitive demand. Instruction is aligned to standards when the colors of the cells on the left and right match. The color map is updated over time as teachers complete more instruction, which support reflection on content that needs more and less emphasis throughout the school year.

Instruction (800 minutes)					Topic Categories	Target (7200 minutes)								
Tutel	Memorize/Recsil	Perform Pracedures	Demonstate/ Communicate Understanding	Justify/Evaluate	Generalize	Applyto Rest World Problems		Memarize/Recall	Perform Procedures	Demonstate/ Communicate Understanding	Justify/Evaluste	Generalize	Appryto Rest World Problems	Tatal
0.318	0.000	0.181	0.112	800.0	0.017	0.000	Whole Number Operations	0.000	0.077	0.059	0.009	0.021	0.000	0.166
0.250	0.077	0.080	0.072	0.021	0.000	0.000	Fraction, decimal, and percent operations	0.003	0.129	0.107	0.000	0.013	0.000	0.252
0.297	0.072	0.115	0.105	0.005	0.000	0.000	Number Sense/Properties/Relationships	0.028	0.081	0.043	0.024	0.040	0.000	0.216
0.000	0.000	0.000	0.000	0.000	0.000	0.000	Measurement	0.053	0.080	0.022	0.000	0.004	0.010	0.169
0.000	0.000	0.000	0.000	0.000	0.000	0.000	Consumer Applications	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	Basic Algebra	0.000	0.056	0.021	0.007	0.015	0.000	0.099
0.000	0.000	0.000	0.000	0.000	0.000	0.000	Advanced Algebra	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	Geometric Concepts	0.027	0.061	0.000	0.000	0.000	0.000	0.088
0.110	0.000	0.012	0.098	0.000	0.000	0.000	Data Displays	0.000	0.007	0.000	0.000	0.004	0.000	0.011
0.000	0.000	0.000	0.000	0.000	0.000	0.000	Statistics	0.000	0.000	0.000	0.000	0.000	0.000	0.000

FAST color map example

In addition to the color map, teachers can access detailed charts and graphs that represent the information on their reported instructional accommodations for ELLs and SWDs, math practices/processes, and lexiles. All visuals are updated over time so that teachers can reflect on these features of their instruction throughout the school year.

The **video recordings** of teachers' instruction complement the information in the instructional logs by providing an opportunity for teachers to watch their instruction and, with the support of their FAST coach, reflect on areas of strength and growth. The FAST program provides teachers with video recording equipment, which is used to collect and upload videos of instruction to a secure site. When teachers complete a video recording, they enter information about the recorded lesson in the online portal. After reviewing the video, the FAST coach selects a few short video clips, which support reflection on alignment to standards for all students, including ELLs and SWDs, and the teacher and coach discuss the clips during their individual coaching sessions.

ONLINE LIBRARY OF RESOURCES

The library of resources is accessible through the FAST online portal and includes free resources designed to help

teachers better understand the standards, align instruction to the standards, support ELLs and SWDs in working with aligned material, and maintain a supportive classroom environment. The library includes lesson plans, lesson activities, videos of aligned instruction, and strategies for supporting student work with gradelevel material, FAST

coaches utilize the library of resources during teachers' coaching sessions and CAST meetings.

TIMELINE FOR THE FAST PROGRAM ACTIVITIES

The FAST program begins with a CAST meeting when teachers return at the beginning of the school year. The various components of the program will be introduced in stages, giving teachers an opportunity to become familiar with each component before moving to the next. Over the course of two school years teachers will complete the following:

- » Ten 60-minute individual coaching sessions
- » Ten 60-minute CAST meetings
- » Ten video recordings of instruction
- » Periodic completion of instructional logs
- » Additional individual coaching sessions, as requested by the teacher

Once all of the components have been introduced, the activities will occur in cycles. The **sample calendar** (**on reverse**) shows an example of a cycle of activities over a six-week period.



The FAST program provides teachers with video recording equipment.

All coaching sessions and CAST meetings will be scheduled with the FAST coach to accommodate teachers' **schedules.** All materials, including video recording and conferencing equipment, will be provided by the FAST study team.

EXAMPLE 6-WEEK FAST CYCLE: JANUARY AND FEBRUARY 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				CAST (60 min)		
			Video Record Instruction			
					Complete Log	
	Individual Coaching (60 min)					
					Complete Log	
	Optional Ind. Coaching (30 min)					

Additional Information

For more information, contact Toni Smith, Ph.D. at AIR (tsmith@air.org or 202-403-5926) or Andy Porter, Ph.D. at University of Pennsylvania (andyp@upenn.edu or 215-300-6278).

About C-SAIL

The Center on Standards, Alignment, Instruction, and Learning (C-SAIL) was established in July 2015 to provide an objective source of information on the implementation of the standards adopted by states. Funded by the Institute of Education Sciences of the U.S. Department of Education, C-SAIL is led by a team of researchers from the University of Pennsylvania, American Institutes for Research, the University of Southern California, and Vanderbilt University. Key partners include five states thytat are diverse in both their geography and their approach to collegeand career-readiness standards: California, Kentucky, Massachusetts, Ohio, and Texas.

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